

Work Order ID 128207

Tuesday, January 13, 2015 9:06:51 AM

128207

Page 1

Item ID: D206-642-441 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: Stop ***NS2***
Item Name: Replacement Skidtube, High Gear with Standard Wearplates Fits LH or RH
Start Date: 1/13/2015 Start Qty: 1.00 ***1*** Cust Item ID:
Required Date: 1/13/2015 Req'd Qty: 1.00 ***1*** Customer:
Reference:

Approvals: Process Plan: MLJ Date: 1501-13 Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr	0.00	sel						
D2650	Rev F(DEO)								
100	Document Control	0.00							
100	DOCUMENT CONTROL								
DC	Memo	0.00							
Doc.Control -USB or Paperwork		Photocopy bluefile and create labels per PPP D206-642-441		CHG005					

DAS
68
3-89

JAN 26 2015

MLJ 150126

B128207

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS <table style="width: 100%;"> <tr> <td>Skid-tube ☐</td> <td>Crosstube ☐</td> <td>Water Jet ☐</td> <td>Engineering ☐</td> </tr> <tr> <td>Machining ☐</td> <td>Small Fab ☐</td> <td>Prod. Eng. Coord. ☐</td> <td>Quality ☐</td> </tr> <tr> <td>Thermoforming ☐</td> <td>Finishing ☐</td> <td>Rec/Store/Packaging ☐</td> <td>Other ☐</td> </tr> <tr> <td>Large Fab ☐</td> <td>Composite ☐</td> <td>Supplier ☐</td> <td></td> </tr> </table>	Skid-tube ☐	Crosstube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
Skid-tube ☐	Crosstube ☐	Water Jet ☐	Engineering ☐															
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Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

FAULT CATEGORY

Landing Gear ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Inspection Strip in Tube ☐ Marks/Chatter ☐ Turning Sequence ☐ Wave/Twist in Tube	General ☐ Bend ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Burrs ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Drawing ☐ Drill Holes ☐ Finish ☐ Fit/Function	☐ Folio/Program ☐ Grain ☐ Hardware ☐ Inspection Incomplete/Unqualified ☐ Instructions Incomplete/Unclear ☐ Misaligned/off center ☐ Mislabeled ☐ Misread ☐ Off-set ☐ Out of Calibration ☐ Out of Sequence	☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Positioned Wrong ☐ Power Loss/Surge ☐ Pressure/Forced ☐ Set-up ☐ Temperature/Cure ☐ Weld ☐ Wrong Stock Pulled ☐ Other
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Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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110

110

Skidtubes

Skidtubes

Skidtubes

Memo

1-Deburr Fwd edge of tube

2-Remove ridge on inside of Fwd edge of tube as per Dwg D2650

3-Weld Fwd Cap as per Dwg D2650. Use aluminum rod. Grind D2647 to fit as required.

A/R Aluminum Rod M130812 / M130137 70E15-01-13

4-Grind weld flush to cap on top surface only.

5-Cut aft end 138.60" from front of tube

6-Drill pilot holes using drill jig DT8025 & DT8169 (A,B,C,D). Open to Ø0.312".

7-Drill holes for wearplates using DT 8028-7. Open to Ø 0.297".

8-Open aft cap holes using #6 Drill Bit

9-Open holes for Tow Ring to Ø0.625" as per Dwg D2650, D2650-7 Drilling Detail

10-Remove inner indexing ridge on aft end of skidtube as per Dwg D2650

11-Open holes to finished size as per Dwg D2650, D2650-7 Drilling Detail

12-Deburr and Blow out all chips from inside the tube

Dec 15-1-13

70E15-01-13

15-1-14

DQA: _____ Date: _____



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Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS <table style="width:100%;"> <tr> <td>Skid-tube ☐</td> <td>Crosstube ☐</td> <td>Water Jet ☐</td> <td>Engineering ☐</td> </tr> <tr> <td>Machining ☐</td> <td>Small Fab ☐</td> <td>Prod. Eng. Coord. ☐</td> <td>Quality ☐</td> </tr> <tr> <td>Thermoforming ☐</td> <td>Finishing ☐</td> <td>Rec/Store/Packaging ☐</td> <td>Other ☐</td> </tr> <tr> <td>Large Fab ☐</td> <td>Composite ☐</td> <td>Supplier ☐</td> <td></td> </tr> </table>	Skid-tube ☐	Crosstube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
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Doc/Data									
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Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

FAULT CATEGORY

Landing Gear ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Inspection Strip in Tube ☐ Marks/Chatter ☐ Turning Sequence ☐ Wave/Twist in Tube	General ☐ Bend ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Burrs ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Drawing ☐ Drill Holes ☐ Finish ☐ Fit/Function	☐ Folio/Program ☐ Grain ☐ Hardware ☐ Inspection Incomplete/Unqualified ☐ Instructions Incomplete/Unclear ☐ Misaligned/off center ☐ Mislabeled ☐ Misread ☐ Off-set ☐ Out of Calibration ☐ Out of Sequence	☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Positioned Wrong ☐ Power Loss/Surge ☐ Pressure/Forced ☐ Set-up ☐ Temperature/Cure ☐ Weld ☐ Wrong Stock Pulled ☐ Other
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Accept

N900040100

Setup Start *NS1*

Revision ID:

Item Name: Replacement Skidtube,High Gear with Standard Wearplates Fits LH or RH

Stop *NS2*

Start Date: 1/13/2015 **Start Qty:** 1.00 ***1***

Cust Item ID:

Required Date: 1/13/2015 **Req'd Qty:** 1.00 ***1***

Customer:

Reference:

Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____

Run Start *NR1*

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop *NR2*

[illegible]

DQA: _____ Date: _____



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Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130	QC7-Inspect Chemical Conversion Coat	0.00							
130									
QC	Memo	0.00				1	1	15-1-15	DBL
Quality Control									
140		0.00							
140									
Skidtubes	Skidtubes	0.00							
Skidtubes	Memo	0.00							
	1-Bond D2654-7 web in place as per QSI 015 Ensure holes line up Allow 12 Hrs. cure time before cutting								
	Start Date: 1:00pm								
	Time: _____								
	Finish Date: _____								
	Time: _____								
	A/RSikaflex-291 131120								
	Sikaflex expiry date: 15-10-21								

[Handwritten signature and date 15-1-15]

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

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Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Crosstube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐
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Doc/Data									
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FAULT CATEGORY

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☐ Outside Dimensions
☐ Over/Under tolerance
☐ Part Incorrect
☐ Part Lost/Missing
☐ Part Moved
☐ Positioned Wrong
☐ Power Loss/Surge

☐ Pressure/Forced
☐ Set-up
☐ Temperature/Cure
☐ Weld
☐ Wrong Stock Pulled
☐ Other

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Material									
Operator									
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Landing Gear ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Inspection Strip in Tube ☐ Marks/Chatter ☐ Turning Sequence ☐ Wave/Twist in Tube	General ☐ Bend ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Burrs ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Drawing ☐ Drill Holes ☐ Finish ☐ Fit/Function	☐ Folio/Program ☐ Grain ☐ Hardware ☐ Inspection Incomplete/Unqualified ☐ Instructions Incomplete/Unclear ☐ Misaligned/off center ☐ Mislabeled ☐ Misread ☐ Off-set ☐ Out of Calibration ☐ Out of Sequence ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Positioned Wrong ☐ Power Loss/Surge ☐ Pressure/Forced ☐ Set-up ☐ Temperature/Cure ☐ Weld ☐ Wrong Stock Pulled ☐ Other
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Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
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Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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190	QC5- Inspect part completeness to step on W/O	0.00							DAS 38 9-89
190									
QC	Memo	0.00							

Quality Control

JAN 22 2015

200	Pressure Wash per QSI005 4.3	0.00							
200									
HandFinish	Memo	0.00							
Hand Finishing	Brush alodine tube on crossbolt spacer area, do not acid etch, do not dip tube in tank.								

210	White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum	0.00							
210									
Powdercoat	Memo	0.00							
Powder Coating	Make sure Nut Plate Thread is protected using paint screw, and mask GHW studs.								

START TIME: 1:05
OVEN TEMPERATURE: 320°
FINISH TIME: 1:35

1 x d 10-1-22

1 Ø 10-1-22 DAS 34 9-89

Work Order ID 128207

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Item ID: D206-642-441

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Run Start ***NR1***

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Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
220	QC3- Inspect Part Finish	0.00							
220									
QC	Memo	0.00							
Quality Control									

DAS
15
9-89

1x of 41 15/01/23

Tuesday, January 13, 2015 9:06:51 AM

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Accept

N900040100

Setup Start *NS1*

Revision ID:

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Run Start *NR1*

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop *NR2*

Sequence ID/
Work Center ID

Operation Description

Set Up/ Run Hours

Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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230

0.00

230

HandFinishing

0.00

HandFinish

Memo

Hand Finishing

1-Install inserts & wearpads as per dwg D2922. Use a drop of Sikaflex inside insert holes before installing wearpad/wearplate.

A/RSikaflex-291 11/31/20

Sikaflex expiry date: 12/06

2-Install O-Rings D2651-3 on plugs D2651-1 with Petroleum Jelly and install plugs as per Dwg D2650. Clean excess adhesive RTU 598 B41X

Petroleum Jelly and install
RTU 598 B41x y1125792 exp 15/06

3-Install MS27039-4-06 Screw as per DEO 9153

4-Inspect for foreign object per QSI 024

5-Install D2646 Aft Cap and seal with SikaflexClean excess adhesive

A/R Sikaflex-291 12/3/12

Sikaflex expiry date: 15 06

6-Wing Walk as per Dwg D2650-7 and QSI 005 4.4

Batch: Ad 130936

Work Order ID 128207

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Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
240	QC5- Inspect part completeness to step on W/O	0.00							DAS 38 9-89
240									
QC	Memo	0.00							
Quality Control									15-01-26
250		0.00							
250	Packaging								DAS 46 9-89
Packaging	Memo	0.00							
Packaging	Identify and pack for shipping as per PPP D206-642-441								
	Location: _____								
	PPP Rev: _____								JAN 20 2015
260	QC21- Final Inspection - Work Order Release	0.00							
260									
QC	Memo	0.00							
Quality Control									MUS 15-01-26 UMF 15-1-26

Picklist Print

Tuesday, January 13, 2015 9:06:54 AM

Page 1

Work Order ID: 128207

128207

Parent Item: D206-642-441

D206-642-441

Parent Item Name: Replacement Skidtube, High Gear with Standard Wearplates Fits LH or RH

Start Date: 1/13/2015

Required Date: 1/13/2015

Start Qty: 1.00

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Comments: IPP Rev:H05.10.11 Added D3429-1 per CHG002 KJ/CP/JLM
 IPP Rev:I 08-05-01 add QC3 DD verified by:EC
 IPP Rev:J 08-09-29 revF as per dwg DD verified by: EC IPP rev K
 10.09.27 SS washers for wearplates EC verf:DD IPP Rev:L 12.11.22 now
 swage per ecn12-679 DD verf:JLM IPP REV:M 14.04.25 AS PER
 Ecn14-520 DD VERF:JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D4956-15		Manufactured	No				Each	27.0000		1			
D4956-15									**				
Stainless Steel Wearplate Fwd													
				<u>Location</u>		<u>Loc Qty</u>		<u>Loc Code</u>					
				FP002		27							
				122996		1							
				124078		13							
				126458		13							
D4956-23		Manufactured	No				Each	22.0000		1			
D4956-23									**				
Stainless Steel Wearplate Center Fwd													
				<u>Location</u>		<u>Loc Qty</u>		<u>Loc Code</u>					
				FP002		22							
				124079		11							
				126459		11							
D4956-37		Manufactured	No				Each	5.0000		1			
D4956-37									**				
Stainless Steel Wearplate Aft													
				<u>Location</u>		<u>Loc Qty</u>		<u>Loc Code</u>					
				FP002		5							
				119666		5							

8

15/01/23

15/01/23

15/01/23

Picklist Print

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Page 2

Work Order ID: 128207

128207

Parent Item: D206-642-441

D206-642-441

Parent Item Name: Replacement Skidtube, High Gear with Standard Wearplates Fits LH or RH

Start Date: 1/13/2015

Required Date: 1/13/2015

Start Qty: 1.00

Required Qty: 1.00

D2620 Manufactured No 110 Each 20.0000 1 1

D2620

Skidtube, 206 Skidtube

Location Loc Qty Loc Code

LG002 20

126930 20

DGL 15-1-13.

D2647 Manufactured No 110 Each 17.0000 1 1

D2647

Cap

Location Loc Qty Loc Code

LG001 17

114961 17

BE 15-0-13

D2654-7 Manufactured No 140 Each 2.0000 1 1

D2654-7

* Web

Location Loc Qty Loc Code

LG002 2

108145 1

109327 1

DGL 15-1-15.

D4720-1 Manufactured No 160 Each 405.0000 23 23

D4720-1

Spacer

Location Loc Qty Loc Code

LG001 405

114878 405

15-1-19

Picklist Print

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Page 3

Work Order ID: 128207

128207

Parent Item: D206-642-441

D206-642-441

Parent Item Name: Replacement Skidtube, High Gear with Standard Wearplates Fits LH or RH

Start Date: 1/13/2015

Required Date: 1/13/2015

Start Qty: 1.00

Required Qty: 1.00

CCR264SS3-3

Purchased

No

170

Each

85.0000

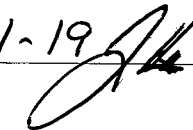
2

2

CCR264SS3-3

Cherry Rivet

**

15-1-19 

Location

Loc Qty

Loc Code

FP001

42

m126333

42

ST321

43

113973

23

m128818

20

②

D2680-041

Manufactured

No

170

Each

24.0000

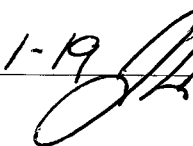
1

1

D2680-041

Nut Plate

**

15-1-19 

Location

Loc Qty

Loc Code

LG001

24

115056

24

①

ALS4-1032-130

AELS4-1032-130

Purchased

No

230

Each

3,613.000

60

60

ALS4-1032-130

Rivnut

**

15/01/23 

Location

Loc Qty

Loc Code

FP001

2542

M128649

2542

st549

1071

M128649

1071

x60

Picklist Print

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Page 5

Work Order ID: 128207

128207

Parent Item: D206-642-441

D206-642-441

Parent Item Name: , Replacement Skidtube, High Gear with Standard Wearplates Fits LH or RH

Start Date: 1/13/2015

Required Date: 1/13/2015

Start Qty: 1.00

Required Qty: 1.00

D2651-3 Manufactured No 230 Each 792.0000 22 22

D2651-3

O-Ring

**

ll 15/01/23

Location	Loc Qty	Loc Code
FP001	792	
113577	16	
120110	776	

✓✓

D3537-1

Manufactured No 230 Each 52.0000 6 6

D3537-1

Wearpad

**

ll 15/01/23

Location	Loc Qty	Loc Code
FG	18	
79833	8	
88562	10	
FP001	34	
125418	3	
126306	31	

B126307

✓

D3537-3

Manufactured No 230 Each 46.0000 1 1

D3537-3

Wearpad

**

ll 15/01/23

Location	Loc Qty	Loc Code
FG	8	
86237	8	
FP001	38	
120646	38	

✓

Picklist Print

Tuesday, January 13, 2015 9:06:54 AM

Page 6

Work Order ID: 128207

128207

Parent Item: D206-642-441

D206-642-441

Parent Item Name: Replacement Skidtube, High Gear with Standard Wearplates Fits LH or RH

Start Date: 1/13/2015

Required Date: 1/13/2015

Start Qty: 1.00

Required Qty: 1.00

MS27039-1-08

Purchased

No

230

Each

1,418.000

2

2

MS27039-1-08

Screw

15/6/12c

Location

Loc Qty

Loc Code

FP001

522

m128636

522

GA

2

125654

2

ST285

894

m128636

894

x2

MS27039-4-06

Purchased

No

230

Each

42.0000

1

1

MS27039-4-06

Screw

15/6/12c

Location

Loc Qty

Loc Code

FP001

10

m126534

10

ST283

32

m126534

32

x1

MS27039C1-08

Purchased

No

230

Each

1,278.000

60

60

MS27039C1-08

SCREW

15/6/12c

Location

Loc Qty

Loc Code

FP001

107

m128650

107

ST273A

731

m128650

731

ST283

440

m128650

440

x60

Picklist Print

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Page 7

Work Order ID: 128207

128207

Parent Item: D206-642-441

D206-642-441

Parent Item Name: Replacement Skidtube, High Gear with Standard Wearplates Fits LH or RH

Start Date: 1/13/2015

Required Date: 1/13/2015

Start Qty: 1.00

Required Qty: 1.00

NAS1149C0332R

Purchased

No

230

Each

3,947.000

60

60

NAS1149C0332R

all skid tubes

WASHER

Location

Loc Qty

Loc Code

FP001

2317

m130325

2317

GA

26

125654

26

ST271

1604

m130325

604

m130466

1000

✓ 60

NAS1149D0332J

Purchased

No

230

Each

1,910.000

2

2

NAS1149D0332J

all skid tubes

Washer

Location

Loc Qty

Loc Code

CA

14

m129682

14

FP001

37

m130325

37

ST269

1859

m130325

1859

x2

Picklist Print

Tuesday, January 13, 2015 9:06:54 AM

Page 8

Work Order ID: 128207

128207

Parent Item: D206-642-441

D206-642-441

Parent Item Name: Replacement Skidtube, High Gear with Standard Wearplates Fits LH or RH

Start Date: 1/13/2015

Required Date: 1/13/2015

Start Qty: 1.00

Required Qty: 1.00

NAS1149D0463J

Purchased

No

230

Each

5,725.000

1

1

NAS1149D0463.J

WASHER

all 1/13/15

Location

Loc Qty

Loc Code

CA	397
M129682	397
GA	408
M129390	408
ST260a	1153
M129390	1153
ST269	3767
M129390	12
M130799	3755

✓

QTY -1	QTY -3	QTY -5	QTY -7	PART NUMBER	DESCRIPTION
X				D2650-1	SKIDTUBE ASSEMBLY
	X			D2650-3	SKIDTUBE ASSEMBLY
		X		D2650-5	SKIDTUBE ASSEMBLY
			X	D2650-7	SKIDTUBE ASSEMBLY
1	1	1	1	D2600-1-160	EXTRUSION
1				D2654-1	WEB
	1			D2654-3	WEB
		1		D2654-5	WEB
			1	D2654-7	WEB
1	1	1	1	D2646	AFT CAP
1	1	1	1	D2647	CAP
17	18	19	23	D2649	CROSS BOLT SPACER
16	18	14	22	D2651-1	PLUG
16	18	14	22	D2651-3	O-RING
1	1	1	1	D2680-041	NUT PLATE
2	2			D3286-1	DOUBLER
2	2			D3286-3	STUD
42	44	54	60	ALS7-1032-130	INSERT (or AKS4-1032-130, ALS4-1032-130, ALS7-1032-130)
2	2	2	2	AN960JD10L	WASHER
2	2	2	2	CCR264SS3-3	RIVET
2	2	2	2	CR3212-4-03	RIVET
2	2	2	2	MS27039-1-08	SCREW
1	1	1	1	MS27039-4-06	SCREW
1	1	1	1	AN960JD416	WASHER
52	52			CR3212-4-04	RIVET

F

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RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 128207.MLS

1501-13

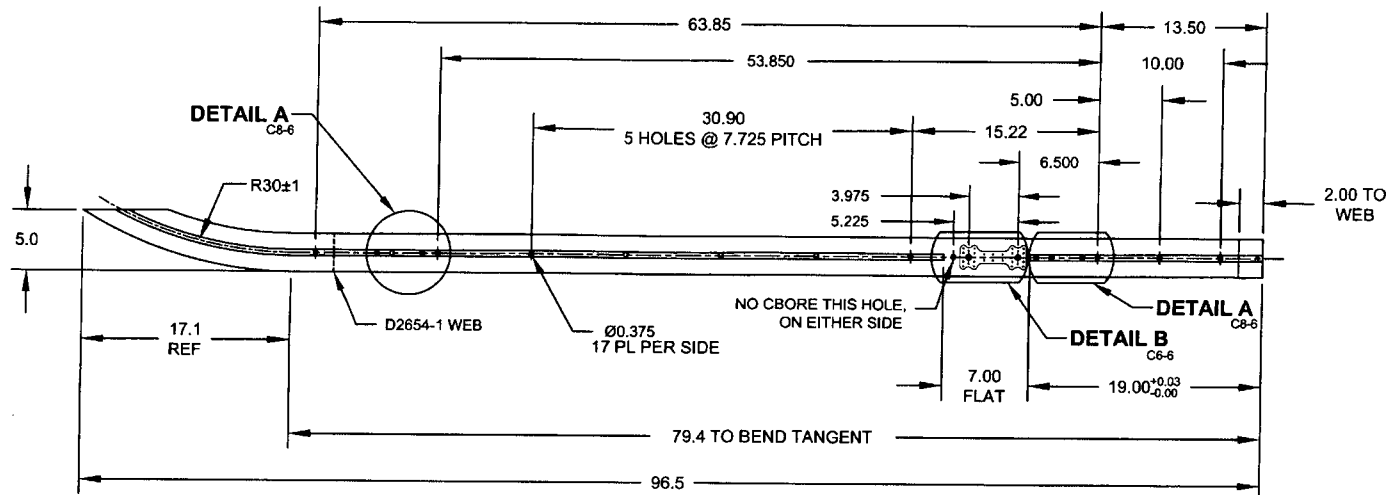
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08-07-23

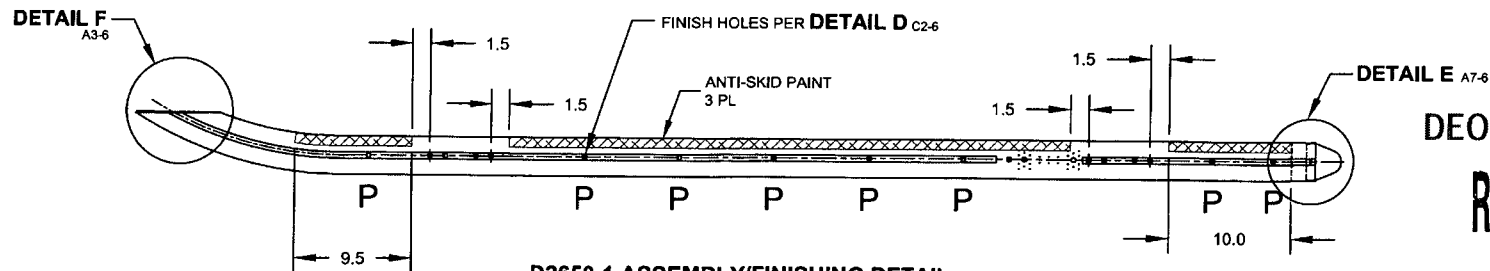
NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: -CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
-POWDER COAT WHITE (4.3.5.1) PER DART QSI 005 4.3
-BLACK ANTI-SKID PAINT AS INDICATED TO 0.5 ABOVE LOCATION RIDGE PER DART QSI 005 4.4
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: N/A
- 8) WELD PER DART QSI 004
- 9) DAMAGE TOLERANCE ON FWD BEND:
THERE SHOULD BE NO VISIBLE WRINKLES IN THE BEND FROM THE GROUND TO A HEIGHT OF 5 INCHES ABOVE THE GROUND. IT IS ACCEPTABLE TO POLISH OUT GOUGES UP TO 0.020 DEEP IN THE BENT PORTION OF THE TUBE. A MAXIMUM REDUCTION IN DIAMETER OF 0.150" IS ACCEPTABLE IN THE BENT PORTION OF THE TUBE.
- 10) BOND WEB INTO OUTER TUBE WITH SIKAFLEX-241/-291 ADHESIVE PER DART QSI 015
- 11) INSERT D2651-1 PLUG C/W D2651-3 O-RING IN HOLES MARKED 'P' (BOTH SIDES OF TUBE)
- 12) DRILL Ø0.297 FOR ALS7-1032-130 INSERTS USING TEMPLATE DT8056-1 ON -1 TUBE, DT8056-3 ON -3 TUBE, DT8056-5 ON -5 TUBE, AND DT8056-7 ON -7 TUBE. INSTALL INSERTS AFTER FINISH.
- 13) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

F	DRAWING UPDATED TO CURRENT STANDARDS. SHT 6 ADDED. ALL SECTION AND DETAIL VIEWS TRANSFERRED TO SHT 6. SHT 1 IN PL PART D2649 QTY UPDATED. SHT 6 SECT C-C GRIND INSTRUCTIONS DELETED FROM NOTE 7 (SEE NCR 239).	AJS	08.08.08
E	REMOVE CBORE, CHG DRILL, ADD CHAMFER	CP	06.03.30
D	REDRAW; INCCRP. DE09136/9153/9163 MOD GROUND HANDLING ON D2650-1/-3	CP	04.05.17
C	CHANGE HOLE PATTERN AND FRONT END	DS	97.10.29
B	AS MANUFACTURED CHANGES	DS	97.06.26
A	NEW ISSUE	DS	97.03.25
REV.	DESCRIPTION	BY	DATE
DESIGN	DS	DART AEROSPACE USA, INC PORT HADLOCK, WA	
DRAWN	AJS		
CHECKED		DRAWING NO.	REV. F
MFG. APPR.		D2650	SHEET 1 OF 6
APPROVED		TITLE	SCALE
DE APPR.		206/407 SKIDTUBE ASSEMBLIES	NTS
DATE	08.08.08	COPYRIGHT © 1997 BY DART AEROSPACE USA, INC THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.	



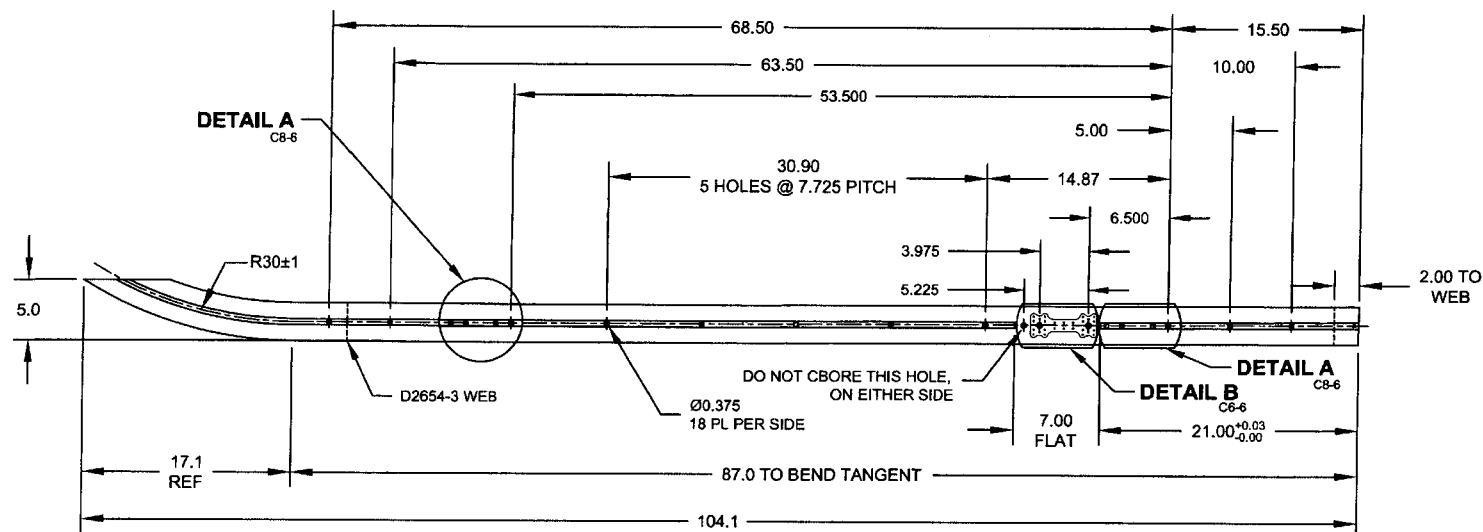
D2650-1 BENDING/DRILLING DETAIL



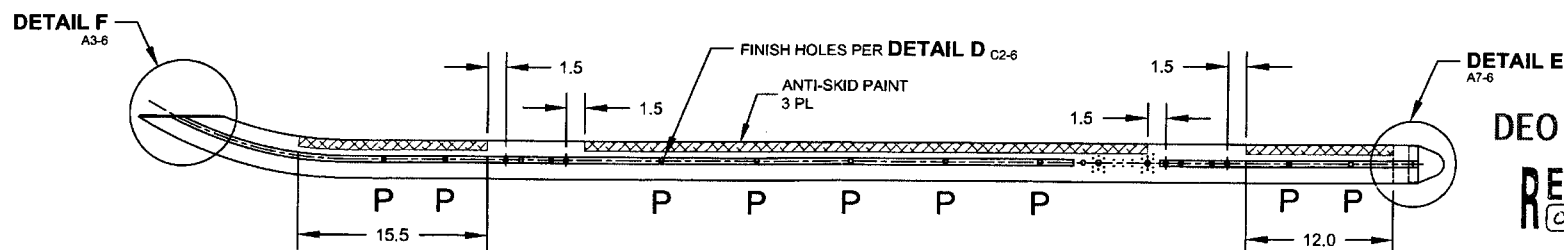
D2650-1 ASSEMBLY/FINISHING DETAIL

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DESIGN	DS	DART AEROSPACE USA, INC	
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CHECKED		DRAWING NO.	REV. F
MFG. APPR.		D2650	SHEET 2 OF 6
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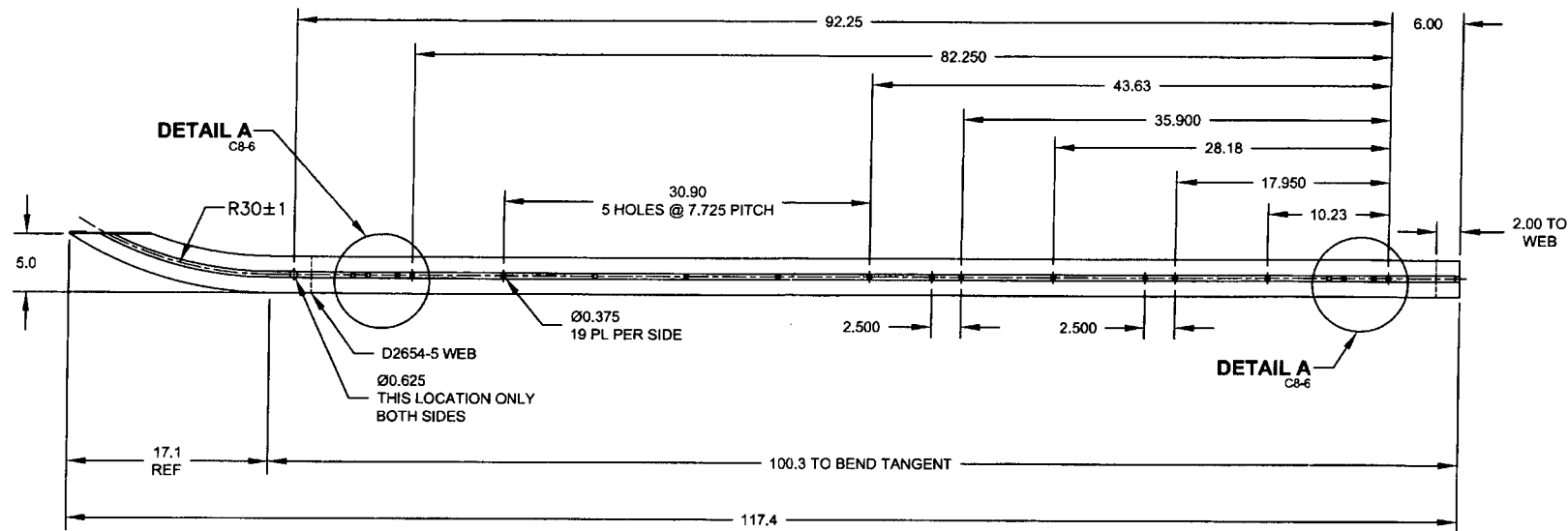


D2650-3 BENDING/DRILLING DETAIL

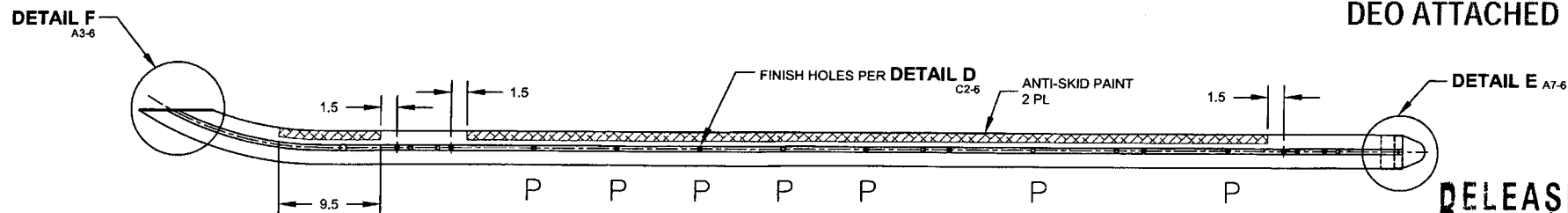


D2650-3 ASSEMBLY/FINISHING DETAIL

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CHECKED		DRAWING NO.	REV. F
MFG. APPR.		D2650	SHEET 3 OF 6
APPROVED		TITLE	SCALE
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D2650-5 BENDING/DRILLING DETAIL

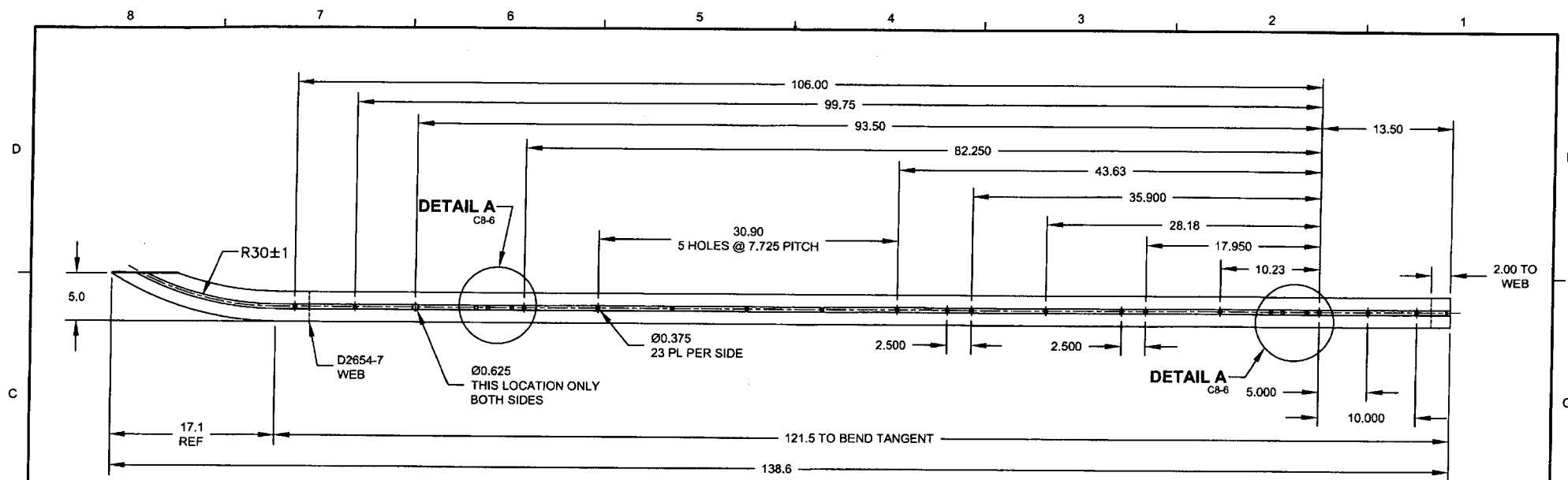


D2650-5 ASSEMBLY/FINISHING DETAIL

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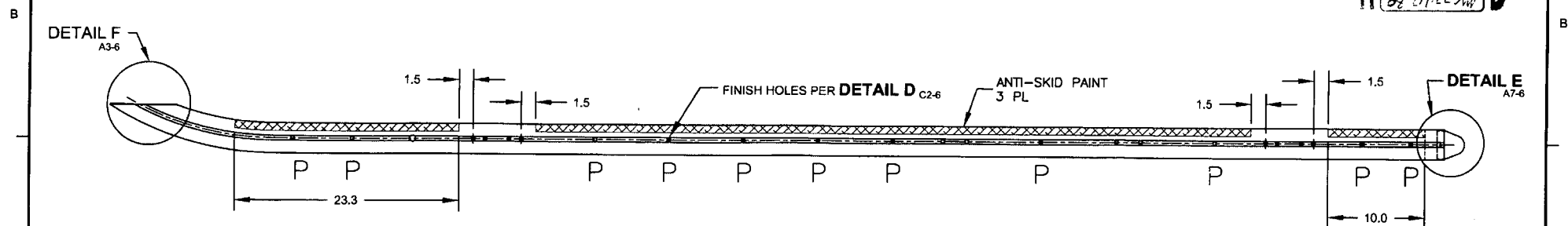
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DRAWN	AJS	PORT HADLOCK, WA	
CHECKED		DRAWING NO.	REV. F
MFG. APPR.		D2650	SHEET 4 OF 6
APPROVED		TITLE	SCALE
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D2650-7 BENDING/DRILL DETAIL

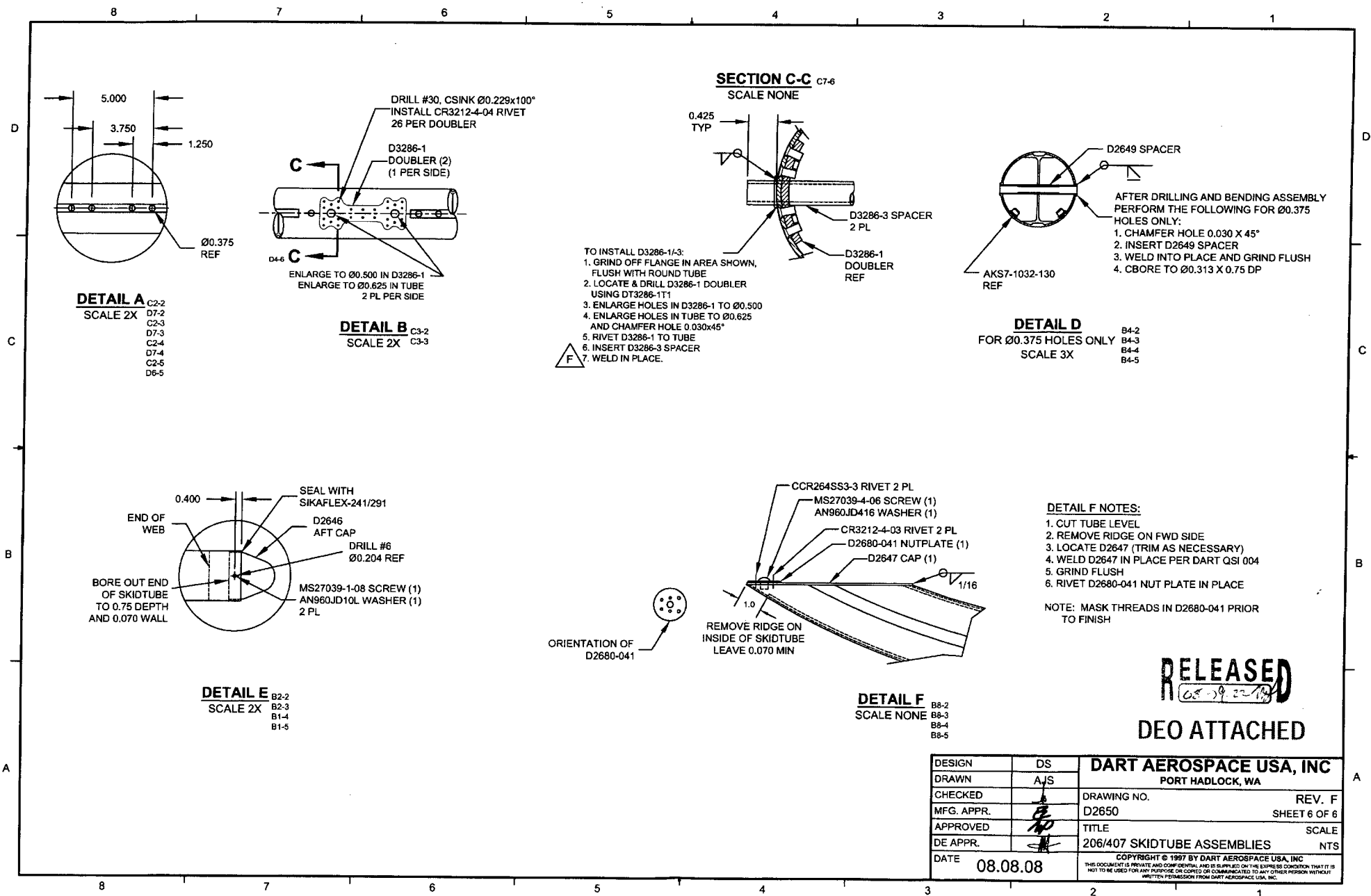
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RELEASE
04 07-22 1111



D2650-7 ASSEMBLY/FINISHING DETAIL

DESIGN	DS	DART AEROSPACE USA, INC. PORT HADLOCK, WA	
DRAWN	AJS		
CHECKED	<i>[Signature]</i>	DRAWING NO.	REV. F
MFG. APPR.	<i>[Signature]</i>	D2650	SHEET 5 OF 6
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	206/407 SKIDTOE ASSEMBLIES	NTS
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DRAWING NO. D2650	TITLE 206/407 SKIDTUBE ASSEMBLIES	REV. F	DART AEROSPACE LTD ENGINEERING ORDER		D.E.O. NO. D2650-F-1	SHEET NO. SHEET 1 OF 1	SCALE NTS
DRAWN <i>[Signature]</i>	CHECKED A.P.	MFG. APPR. <i>[Signature]</i>	APPROVED <i>[Signature]</i>		DE APPR. <i>[Signature]</i>		
DATE 12.10.12	DATE 12.10.22	DATE 12.10.22	DATE 12.10.22		DATE 12.10.22		

PURPOSE:

CHANGE C'BORED WELDED CROSSBOLT SPACERS TO SWAGED SPACERS

CHANGE:

PARTS LIST IS AMENDED AS FOLLOWS:

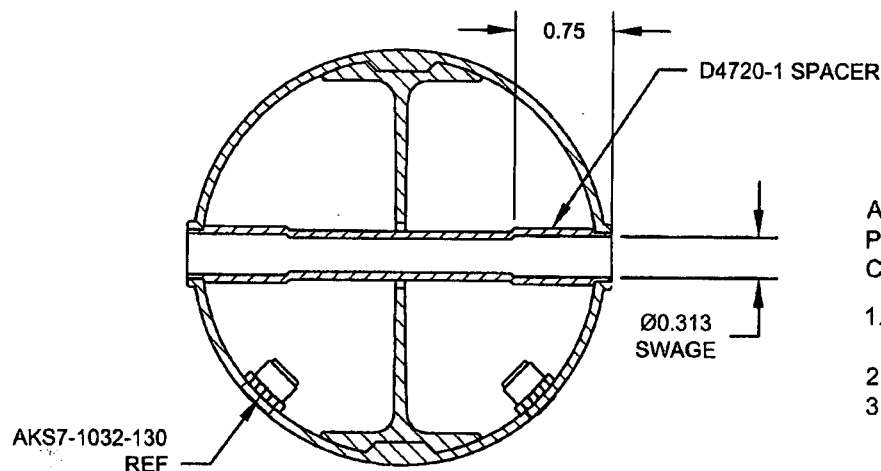
IS:

QTY -1	QTY -3	QTY -5	QTY -7	PART NUMBER	DESCRIPTION
1	1	0	0	D2649	CROSS BOLT SPACER
16	17	19	23	D4720-1	SPACER

WAS:

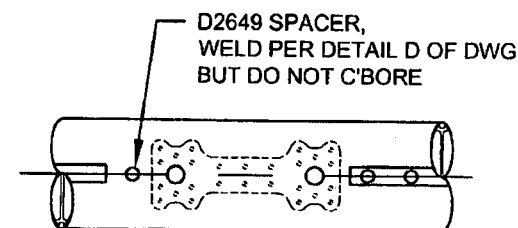
17	18	19	23	D2649	CROSS BOLT SPACER
----	----	----	----	-------	-------------------

ADD DETAIL G BELOW, WHICH IS THE SAME SECTION VIEW AS DETAIL D OF DWG.
C'BORED HOLES ARE NOW SWAGED PER DETAIL G BELOW. FOR THE Ø0.375 HOLE THAT IS NOT C'BORED, WELD PER DETAIL D OF DWG (SEE AMENDED DETAIL B FOR REFERENCE).



DETAIL G

FOR Ø0.375 HOLES ONLY
FOR HOLES THAT ARE CURRENTLY C'BORED ONLY
NOT TO SCALE



DETAIL B

AMENDMENT TO DETAIL B
NOT TO SCALE

RELEASED
2012-11-16
[Signature]

AFTER DRILLING AND BENDING ASSEMBLY
PERFORM THE FOLLOWING FOR Ø0.375 HOLES THAT ARE
CURRENTLY C'BORED:

1. INSERT D4720-1 SPACER, 16 PL (-1) OR 17 PL (-3)
OR 19 PL (-5) OR 23 PL (-7)
2. SWAGE TO Ø0.313 X 0.75 DP PER QSI 002
3. TRIM / GRIND FLUSH PER QSI 002

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